

## Chapter 173-183 WAC

### ~~((PREASSESSMENT SCREENING AND OIL SPILL COMPENSATION SCHEDULE REGULATIONS))~~ OIL SPILL NATURAL RESOURCE DAMAGE ASSESSMENT

AMENDATORY SECTION (Amending Order 07-14, filed 11/7/07, effective 12/8/07)

**WAC 173-183-100 Definitions.** (1) "Columbia River estuary environment" means the habitat and all other public resources associated with or dependent on the estuarine waters of the Columbia River.

(2) "Compensation schedule" means the set of procedures enumerated in WAC 173-183-300 through 173-183-870 to determine the public resource damages resulting from an oil spill for cases in which damages are not quantifiable at a reasonable cost.

(3) "Damages" means the amount of monetary compensation necessary to:

(a) Restore any injured public resource to its condition before sustaining injury as a result of an oil discharge in violation of chapter 90.48 or 90.56 RCW, to the extent technically feasible, including any loss in value incurred during the period between injury and restoration in cases where damages are quantifiable at a reasonable cost; or

(b) Adequately compensate for the loss or diminution in value as determined through application of the compensation schedule provided in WAC 173-183-300 through 173-183-870 in cases where damages are not quantifiable at a reasonable cost.

(4) "Department" means the department of ecology.

(5) "Director" means the director of the department of ecology, or his or her designee.

(6) "Discharge" means any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.

(7) "Estuarine environment" means the habitat and all other public resources associated with or dependent on estuarine waters of the state.

(8) "Estuarine waters" or "estuarine waters of the state" means the waters within state jurisdiction that are semienlosed by land but have open, partly obstructed, or sporadic access to the ocean, and in which seawater is at least occasionally diluted by freshwater runoff from land. Estuarine waters of the state include adjacent tidal flats and beaches up to the limit of tidal inundation or wave splash. For purposes of this chapter, estuarine

waters of the state include those designated on the map attached as Appendix 1 to this chapter, and the portion of the Columbia River estuary within state jurisdiction upstream to river mile 46 or the line drawn perpendicularly across the river which touches the upstream end of Puget Island.

(9) "Freshwater stream, river, and lake environment" means the habitat and all other public resources associated with or dependent on the streams, rivers, and lakes under state jurisdiction.

(10) "Freshwater wetland" or "freshwater wetlands" means lands transitional between terrestrial and freshwater aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water, and lands having one or more of the following attributes at least periodically: The land supports predominantly hydrophytes; the substrate is predominately undrained hydric soil; and the substrate is nonsoil and saturated with water or covered by shallow water at some time during the growing season each year.

(11) "Freshwater wetland environment" means the habitat and all other public resources associated with or dependent on the freshwater wetlands of the state.

(12) "Freshwaters" or "freshwaters of the state" means all waters of the state except those classified as marine and estuarine waters of the state as defined in this chapter, including lakes, rivers, streams, ponds, other surface waters and wetlands.

(13) "Habitat" means the substrate and complement of associated biota not otherwise included in the vulnerability rankings in the applicable compensation schedule(s) that is part of this chapter.

(14) "Immediate removal" or "immediately removes" means removal of the spilled oil, or portions thereof, from the receiving environment by the potentially liable party within six hours of spill initiation.

(15) "Initial department responder" means the department of ecology spill responder who first arrives at the scene of the spill.

(16) "Injury" or "injuries" means an adverse change, either long- or short-term, to a public resource resulting either directly or indirectly from exposure to a discharge of oil in violation of chapter 90.48 or 90.56 RCW.

(17) "Loss in services" means a temporary or permanent reduction in the ability of the resource to provide its use or benefit to the public or to other resources.

(18) "Loss in value or lost value" of a damaged resource means the amount equal to the sum of consumptive, nonconsumptive, and indirect use values, as well as lost taxation, leasing, and licensing revenues during the period between injury and restoration; indirect use values may include existence, bequest, option, and aesthetic values.

(19) "Marine and estuarine habitats" mean the habitats found in marine and estuarine waters of the state as defined in this chapter.

(20) "Marine birds" means all seabirds, shorebirds, waterfowl, raptors and other avifauna that are dependent on marine and

estuarine environments of the state for some portion of their life requirements including feeding, breeding, and habitat.

(21) "Marine environment" means the habitat and all other public resources associated with or dependent on marine waters of the state.

(22) "Marine fish," in context of the compensation schedule, means the species listed in Appendix 2.

(23) "Marine mammals" means the cetaceans, pinnipeds, sea otters, and river otters associated with marine and estuarine waters of the state.

(24) "Marine waters" or "marine waters of the state" means all coastal waters not appreciably diluted by freshwater, including open coastal areas, straits, and euhaline inland waters extending from the seaward limit of state jurisdiction to:

- (a) The landward limit of tidal inundation or wave splash; or
- (b) The seaward limit of estuarine waters of the state.

(25) "Nonpersistent or group 1 oil" means:

(a) A petroleum-based oil, such as gasoline, diesel or jet fuel, which evaporates relatively quickly. Such oil, at the time of shipment, consists of hydrocarbon fractions of which:

(i) At least fifty percent, by volume, distills at a temperature of 340°C (645°F); and

(ii) At least ninety-five percent, by volume, distills at a temperature of 370°C (700°F); or

(b) A nonpetroleum oil with a specific gravity less than 0.8.

(c) For the purposes of WAC 173-183-870, any spilled oil that consists of a combination of spilled nonpersistent and spilled persistent oil, will be considered a nonpersistent oil.

(26) "Nonpetroleum oil" means oil of any kind that is not petroleum-based, including but not limited to: Biological oils such as fats and greases of animals and vegetable oils, including oils from seeds, nuts, fruits, and kernels.

(27) "Not quantifiable at a reasonable cost" means any diminution in value of a public resource that cannot be measured with sufficient precision or accuracy by currently available and accepted procedures within a reasonable time frame.

~~((+26+))~~ (28) "Oil" or "oils" means oil of any kind that is liquid at atmospheric temperature and pressure and any fractionation thereof, including, but not limited to, crude oil, petroleum gasoline, fuel oil, diesel oil, oil sludge, oil refuse, biological oils and blends, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of C.F.R. Part 302 adopted August 14, 1989, under section 101(14) of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by P.L. 99-499.

~~((+27+))~~ (29) "On scene coordinator" (OSC) means the department official who supervises the spill response team and compiles the initial report concerning the facts and circumstances of the spill for the department.

~~((+28+))~~ (30) "Persistent oil" means:

(a) Petroleum-based oil that does not meet the distillation criteria for a nonpersistent oil. Persistent oils are further classified based on both specific and American Petroleum Institute

(API) observed gravities corrected to 60°F, as follows:

(i) Group 2 - Specific gravity greater than or equal to 0.8000 and less than 0.8500. API gravity less than or equal to 45.00 and greater than 35.0;

(ii) Group 3 - Specific gravity greater than or equal to 0.8500, and less than 0.9490. API gravity less than or equal to 35.0 and greater than 17.5;

(iii) Group 4 - Specific gravity greater than or equal to 0.9490 and up to and including 1.0. API gravity less than or equal to 17.5 and greater than 10.00; and

(iv) Group 5 - Specific gravity greater than 1.0000. API gravity equal to or less than 10.0.

(b) A nonpetroleum oil with a specific gravity of 0.8 or greater. These oils are further classified based on specific gravity as follows:

(i) Group 2 - Specific gravity equal to or greater than 0.8 and less than 0.85;

(ii) Group 3 - Specific gravity equal to or greater than 0.85 and less than 0.95;

(iii) Group 4 - Specific gravity equal to or greater than 0.95 and less than 1.0; or

(iv) Group 5 - Specific gravity equal to or greater than 1.0.

(31) "Person" means any political subdivision, government agency, municipality, industry, public or private corporation, copartnership, association, firm, individual, or any other entity whatsoever.

((+29+)) (32) "Potentially liable party" means the person or persons who may be liable for damages resulting from an oil spill.

((+30+)) (33) "Preassessment screening" means the investigation and determination of the facts and circumstances surrounding an oil spill which are used to determine whether a damage assessment investigation should be conducted, or alternatively, whether the compensation schedule will be used to assess damages.

((+31+)) (34) "Public resources" or "publicly owned resources" means fish, animals, vegetation, land, waters of the state, and other resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the state.

((+32+)) (35) "Reasonable cost" for a damage assessment means a cost that is anticipated to be less than the amount of damages that may have occurred or may occur.

((+33+)) (36) "Receiving environment" means waters of the state exposed to the spill and all public resources associated with or dependent on the exposed waters.

((+34+)) (37) "Recovered oil" is oil removed from the water using hand or mechanical techniques or oleophilic sorbent materials. It does not include spilled oil remobilized as a clean-up effort after shoreline contact and it does not include oil removed from the water's surface using dispersing or solidifying agents, or oil removed by burning.

(38) "Resource damage assessment committee" or "RDA committee" means the preassessment screening committee established under RCW 90.48.368 and charged with determining whether to conduct detailed

damage assessment studies or to apply the compensation schedule for oil spills into waters of the state, and overseeing reconnaissance and damage assessment activities.

((+35+)) (39) "Restoration or enhancement projects or studies" means an activity that is intended to restore, replenish, restock, or replace public resources, or to further investigate the long-term effect of resource injuries as determined by the RDA committee for the benefit of the public.

((+36+)) (40) "Salmon," in context of the compensation schedule, means the species listed in Appendix 3.

((+37+)) (41) "Scientific advisory board" means the advisory group established by the department to assist in development of the compensation schedule as required by RCW 90.48.366.

((+38+)) (42) "Season" or "seasons" means winter, spring, summer, and/or fall, where winter occurs during the months December through February, spring occurs during the months March through May, summer occurs during the months June through August, and fall occurs during the months September through November.

((+39+)) (43) "Shellfish," in context of the compensation schedule, means the species listed in Appendix 4, but does not include privately grown shellfish on public lands.

((+40+)) (44) "Shoreline" for the purposes of WAC 173-183-870 only, means any interface between the surface of the waters of the state, including wetlands, and sediment or soil.

(45) "Spill" means an unauthorized discharge of oil into waters of the state.

((+41+)) (46) "State" means state of Washington.

((+42+)) (47) "State trustee agencies" means the state agencies with responsibility for protecting and/or managing public resources.

((+43+)) (48) "Subregion" or "subregions" means the areas into which state marine and estuarine waters have been divided for purposes of the compensation schedule as designated on the maps attached as Appendix 1.

((+44+)) (49) "Technical feasibility" or "technically feasible" means that given available technology, a restoration or enhancement project can be successfully completed at a cost that is not disproportionate to the value of the public resource before the injury.

((+45+)) (50) "Trust resources" means the public resource(s) under a particular state agency's jurisdiction for protection and/or management.

((+46+)) (51) "Unquantifiable damage" means any diminution in value of a public resource that cannot be measured with sufficient precision or accuracy by currently available and accepted procedures within a reasonable period of time.

((+47+)) (52) "Waters of the state" or "state waters" includes lakes, rivers, ponds, streams, inland waters, underground water, salt waters, estuaries, tidal flats, beaches, and lands adjoining the seacoast of the state, sewers, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

((+48+)) (53) "Wetland" or "wetlands" means lands transitional between terrestrial and aquatic systems where the water table is

usually at or near the surface or the land is covered by shallow water, and lands having one or more of the following attributes at least periodically: The land supports predominantly hydrophytes; the substrate is predominantly undrained hydric soil; and the substrate is nonsoil and saturated with water or covered by shallow water at some time during the growing season each year.

AMENDATORY SECTION (Amending Order 91-13, filed 4/23/92, effective 5/24/92)

**WAC 173-183-230 RDA committee.** (1) The following state agencies shall have membership on the RDA committee: Departments of archaeology and historic preservation, ecology, ~~((fisheries))~~ fish and wildlife, health, natural resources, ~~((wildlife))~~ and the parks and recreation commission.

(2) Agencies with membership on the RDA committee shall nominate a representative and alternate to be appointed to the committee by the director.

(3) The department of ecology shall chair the RDA committee.

(4) The department may select representatives from the following agencies and governments for participation on the RDA committee on a spill-by-spill basis: Departments of emergency management, as well as other federal, state, and local agencies, and tribal and local governments whose presence would enhance reconnaissance or damage assessment activities of spill response.

If a selected representative declines or is unable to participate on the committee, the representative shall provide written notice to the department within twelve hours of being notified so that a replacement member may be appointed. Prompt consideration will be given to other local, state, or federal agency, or tribal government requests for participation on the RDA committee on a spill-by-spill basis.

(5) The RDA committee shall convene as soon as possible, but no later than thirty days after the department receives notification of a spill, or the next regularly scheduled meeting of the committee following a spill.

AMENDATORY SECTION (Amending Order 07-14, filed 11/7/07, effective 12/8/07)

**WAC 173-183-320 Compensation schedule.** (1) The compensation schedule determines adequate compensation for unquantifiable damages or for damages not quantifiable at a reasonable cost for persons liable under RCW 90.48.142.

(2) Adequate compensation as determined from the compensation schedule is derived from preexisting information of resource vulnerability to a class of oil spilled in a particular subregion of the state during a particular season, plus any additional information collected at the reconnaissance stage of the spill response.

(3) Under RCW 90.48.366, the amount of compensation assessed under this schedule shall be:

(a) For spills totaling one thousand gallons or more in any one event, no less than three dollars per gallon of oil spilled and no greater than three hundred dollars per gallon of oil spilled; and

(b) For spills totaling less than one thousand gallons in any one event, no less than one dollar per gallon of oil spilled and no greater than one hundred dollars per gallon of oil spilled.

AMENDATORY SECTION (Amending Order 91-13, filed 4/23/92, effective 5/24/92)

**WAC 173-183-330 Resource damage assessment using the compensation schedule.** The compensation schedule includes:

(1) A relative ranking for each of the classes of oil defined in this chapter as determined by their known chemical, physical, and mechanical properties, and other factors that may affect the severity and persistence of the spill on the receiving environment;

(2) A relative vulnerability ranking of receiving environments which takes into account location of the spill, habitat and public resource sensitivity to oil, seasonal distribution of public resources, areas of recreational use and aesthetic importance, the proximity of the spill to important habitats for birds, aquatic mammals, fish, or to species listed as threatened or endangered under state or federal law, and other areas of special ecological or recreational importance as determined by the department;

(3) A quantitative method for determining public resource damages resulting from an oil spill, based on the oil effects and vulnerability rankings designed to compensate the people of this state for those damages that cannot be quantified at a reasonable cost that result from oil spills; and

(4) A method for adjusting damages calculated under the compensation schedule based on recovery actions taken by the potentially liable party ((that:

~~(a) Demonstrate a recognition and affirmative acceptance of responsibility for the spill, such as the immediate removal of oil and the amount of oil removed from the environment; or~~

~~(b) Enhance or impede the detection of the spill, the determination of the quantity of oil spilled, or the extent of damage, including the unauthorized removal of evidence such as injured fish or wildlife)).~~

AMENDATORY SECTION (Amending Order 91-13, filed 4/23/92, effective 5/24/92)

**WAC 173-183-400 Vulnerability of marine and estuarine environments to oil spills.** (1) The purpose of this section is to describe the method of ranking vulnerability of marine and estuarine environments, excluding the Columbia River estuary environment to oil spills for the purposes of assessing damages using the compensation schedule.

(2) Marine and estuarine waters of the state excluding the Columbia River estuary are divided into sixteen regions and one hundred thirty-one subregions for purposes of RCW 90.48.366, as designated on the maps attached as Appendix 5 of this chapter.

(3) A spill vulnerability score (SVS) shall be calculated at the time of a spill for the most sensitive subregion and season impacted by the spill. The SVS rates the vulnerability of public resources to spilled oil based on the propensity of the oil to cause acute toxicity and mechanical injury, and to persist in the environment. SVS is determined by summing the vulnerability scores for marine birds, marine mammals, fishery species, recreational use and habitats for the subregion(s) and most sensitive season impacted by the spill. The formula to be used to calculate SVS for each of the three oil effects, acute toxicity, mechanical injury, and persistence, is as follows:

$$\text{Spill vulnerability score (SVS)}_{ij} = \text{HVS}_i + \text{BVS}_j + \text{MVS}_j + \text{MFVS}_j + \text{SFVS}_j + \text{SAVS}_j + \text{RVS}_j$$

where  $\text{HVS}_i$  = habitat vulnerability to oil's propensity to cause i

$\text{BVS}$  = marine bird vulnerability score (WAC 173-183-420(3));

$\text{MVS}$  = marine mammal vulnerability score (WAC 173-183-460(3));

$\text{MFVS}$  = marine fisheries vulnerability score (WAC 173-183-430(3));

$\text{SFVS}$  = shellfish vulnerability score (WAC 173-183-440(3));

$\text{SAVS}$  = salmon vulnerability score (WAC 173-183-450(5));

$\text{RVS}$  = recreation vulnerability score (WAC 173-183-470(3));

i = acute toxicity (AT), mechanical injury (MI), or persistence (((~~Per~~) PER); and

j = the most sensitive season affected by the spill: Spring, summer, fall, or winter



AMENDATORY SECTION (Amending Order 91-13, filed 4/23/92, effective 5/24/92)

**WAC 173-183-810 On-scene coordinator responsibilities.** (1) The OSC (~~((or department responder,))~~) or (~~((his or her))~~) designee(~~((7))~~) shall make the following determinations:

- (a) Quantity and type of oil spilled;
- (b) Extent and location of the spill; (~~((and))~~)
- (c) Whether containment of spilled oil was effective within the times specified in WAC 173-183-870 (1)(c) and (d);
- (d) Whether spilled oil contacted the shoreline within the times specified in WAC 173-183-870 (1)(c) and (d); and
- (e) The amount of oil cleaned up on a daily basis, and in total.

(2) The RDA committee shall allow the potentially liable party an opportunity to submit further information on the determinations made by the OSC in subsection (1) of this section.

(3) The potentially liable party (PLP) may hire an independent expert to determine the volume of oil spilled and (~~((cleaned up))~~) recovered, including the volume (~~((cleaned up))~~) recovered within the first (~~((six hours))~~) twenty-four hours for nonpersistent oil and forty-eight hours for persistent oil after spill initiation. The volume determinations made by the independent expert shall be used in calculations of damages under the compensation schedule if the independent expert selected is acceptable to both the PLP and the department. Determinations by the mutually agreed upon independent expert of the quantity of oil spilled and cleaned up shall be provided to the RDA committee chair within sixty days of the spill under consideration.

(~~((3))~~) (4) The OSC (~~((or department responder))~~) shall provide the information enumerated in subsection (1) of this section to the RDA committee chair in a timely manner.

AMENDATORY SECTION (Amending Order 08-14, filed 3/10/09, effective 4/10/09)

**WAC 173-183-830 Calculation of damages for spills into marine and estuarine waters, except the Columbia River estuary.** (1) The formula provided in subsection (2) of this section shall be used to determine damages liability for spills into marine and estuarine waters, except the estuarine waters of Columbia River. The value of the variables used in the formula shall be determined by:

- (a) The OSC as enumerated in WAC 173-183-810(1);
- (b) The mutually agreed upon independent expert, if applicable, as described in WAC 173-183-810(2); and
- (c) The RDA committee chair as enumerated in WAC 173-183-820(1)(a).

(2) In making the determination of percent-coverage of habitat

types, the RDA committee chair may assume that the habitat-type visible at low tide extends out to the 20 meter depth contour.

(3) Damages liability shall be calculated using the following formula:

$$((\text{Damages } \$) = \text{gallons spilled} * 0.208 * [(OIL_{AT} * SVS_{ATj}) + (OIL_{MI} * SVS_{MIj}) + (OIL_{PER} * SVS_{PERj})])$$

where: gallons spilled = the number of gallons of oil spilled as determined by the procedures outlined in WAC 173-183-810;  
 $SVS_{ij}$  = spill vulnerability score (from WAC 173-183-400(3));  
 $OIL_{AT}$  = Acute Toxicity Score for Oil (from WAC 173-183-340);  
 $OIL_{MI}$  = Mechanical Injury Score for Oil (from WAC 173-183-340); and  
 $OIL_{PER}$  = Persistence Score for Oil (from WAC 173-183-340);  
*i* = acute toxicity, mechanical injury and persistence effect of oil  
*j* = the most sensitive season affected by the spill  
0.208 = multiplier to adjust the damages calculated to the \$1-100 per gallon range:))

$$\text{Damages } \$ = x * [(OIL_{AT} * SVS_{ATj} * \text{total gallons spilled}) + (OIL_{MI} * SVS_{MIj} * \text{total gallons spilled}) + (OIL_{PER} * SVS_{PERj} * \text{total gallons spilled})]$$

where: total gallons spilled = the number of gallons of oil spilled as determined by the procedures outlined in WAC 173-183-810;  
 $SVS_{ij}$  = spill vulnerability score (from WAC 173-183-400(3));  
 $OIL_{AT}$  = Acute Toxicity Score for Oil (from WAC 173-183-340);  
 $OIL_{MI}$  = Mechanical Injury Score for Oil (from WAC 173-183-340); and  
 $OIL_{PER}$  = Persistence Score for Oil (from WAC 173-183-340);  
*i* = acute toxicity, mechanical injury and persistence effect of oil  
*j* = the most sensitive season affected by the spill  
*x* = multiplier of 0.208 for spills less than 1000 gallons in volume to adjust the damages calculated to the \$1-100 per gallon range.  
*x* = multiplier of 0.624 for spills of 1000 gallons or more in volume to adjust the damages calculated to the \$3-300 per gallon range.

Formula results shall be rounded to the nearest 0.01 to determine damages liability as follows: Decimals less than 0.005 shall be rounded down, and decimals equal to or greater than 0.005 shall be rounded up. For spills less than one thousand gallons, when the formula results in damages less than one dollar per

gallon, the damages shall be adjusted to the minimum of one dollar per gallon spilled. For spills of one thousand gallons or more in volume, when the formula results in damages less than three dollars per gallon, the damages shall be adjusted to the minimum of three dollars per gallon spilled.

AMENDATORY SECTION (Amending Order 08-14, filed 3/10/09, effective 4/10/09)

**WAC 173-183-840 Calculation of damages for spills into the Columbia River estuary.** (1) The formula provided in subsection (2) of this section shall be used to determine damages liability for spills into the estuarine waters of Columbia River. The value of the variables used in the formula shall be determined by:

- (a) The OSC as enumerated in WAC 173-183-810(1);
  - (b) The mutually agreed upon independent expert, if applicable, as described in WAC 173-183-810(2); and
  - (c) The RDA committee chair as enumerated in WAC 173-183-820(1)(b).
- (2) Damages liability shall be calculated using the following formula:

((Damages (\$) =  
gallons  
spilled\*0.508\*SVS<sub>j</sub>\*(OIL<sub>AT</sub>+OIL<sub>MI</sub>+OIL<sub>PER</sub>)  
where: gallons spilled = the number of gallons of oil  
spilled as determined by procedures outlined in  
WAC 173-183-810  
SVS<sub>j</sub> = spill vulnerability score (from WAC 173-  
183-500(3));  
j = the most sensitive season affected by the spill  
OIL<sub>AT</sub> = Acute Toxicity Score for Oil (from  
WAC 173-183-360);  
OIL<sub>MI</sub> = Mechanical Injury Score for Oil (from  
WAC 173-183-360); and  
OIL<sub>PER</sub> = Persistence Score for Oil (from WAC  
173-183-360);  
0.508 = multiplier to adjust the damages  
calculated to the \$1-100 per gallon range.))

Damages (\$) =  
x \* [(OIL<sub>AT</sub> \* SVS<sub>j</sub> \* total gallons  
spilled) + (OIL<sub>MI</sub> \* SVS<sub>j</sub> \* total gallons  
spilled) + (OIL<sub>PER</sub> \* SVS<sub>j</sub> \* total gallons spilled)]  
where: total gallons spilled = the number of gallons of oil  
spilled as determined by procedures outlined in  
WAC 173-183-810;  
SVS<sub>j</sub> = spill vulnerability score (from WAC 173-  
183-500(5));  
j = the most sensitive season affected by the spill

OIL<sub>AT</sub> = Acute Toxicity Score for Oil (from WAC 173-183-340);

OIL<sub>MI</sub> = Mechanical Injury Score for Oil (from WAC 173-183-340); and

OIL<sub>PER</sub> = Persistence Score for Oil (from WAC 173-183-340).

x = multiplier of 0.508 for spills less than 1000 gallons in volume to adjust the damages calculated to the \$1-100 per gallon range.

x = multiplier of 1.524 for spills of 1000 gallons or more in volume to adjust the damages calculated to the \$3-300 per gallon range.

Formula results shall be rounded to the nearest 0.01 to determine damages liability as follows: Decimals less than 0.005 shall be rounded down, and decimals equal to or greater than 0.005 shall be rounded up. For spills less than one thousand gallons, when the formula results in damages less than one dollar per gallon, the damages shall be adjusted to the minimum of one dollar per gallon spilled. For spills of one thousand gallons or more in volume, when the formula results in damages less than three dollars per gallon, the damages shall be adjusted to the minimum of three dollars per gallon spilled.

AMENDATORY SECTION (Amending Order 08-14, filed 3/10/09, effective 4/10/09)

**WAC 173-183-850 Calculation of damages for spills in freshwater streams, rivers, and lakes.** (1) The formula provided in subsection (2) of this section shall be used to determine damages liability for spills into freshwater streams, rivers, and lakes. The value of the variables used in the formula shall be determined by:

- (a) The OSC as enumerated in WAC 173-183-810(1);
- (b) The mutually agreed upon independent expert, if applicable, as described in WAC 173-183-810(2); and
- (c) The RDA committee chair as enumerated in WAC 173-183-820(1)(c).

(2) Damages liability shall be calculated using the following formula:

((Damages (\$) =  
gallons spilled \* 0.162 \* SVS \* (OIL<sub>AT</sub> + OIL<sub>MI</sub>  
+ OIL<sub>PER</sub>))  
where: gallons spilled = the number of gallons of oil  
spilled as determined by the procedures outlined  
in WAC 173-183-810;  
SVS = Spill vulnerability score [from WAC 173-  
183-600(3)];  
OIL<sub>AT</sub> = Acute Toxicity Score for Oil [from WAC  
173-183-340];

$OIL_{MI}$  = Mechanical Injury Score for Oil [from WAC 173-183-340]; and  
 $OIL_{PER}$  = Persistence Score for Oil [from WAC 173-183-340];  
0.162 = multiplier to adjust damages calculated to the \$1-100 per gallon range;))

Damages (\$) =

$x * [(OIL_{AT} * SVS * \text{total gallons spilled}) + (OIL_{ML} * SVS * \text{total gallons spilled}) + (OIL_{PER} * SVS * \text{total gallons spilled})]$

where: total gallons spilled = the number of gallons of oil spilled as determined by the procedures outlined in WAC 173-183-810;

SVS = Spill vulnerability score (from WAC 173-183-600(3));

$OIL_{AT}$  = Acute Toxicity Score for Oil (from WAC 173-183-340);

$OIL_{MI}$  = Mechanical Injury Score for Oil (from WAC 173-183-340); and

$OIL_{PER}$  = Persistence Score for Oil (from WAC 173-183-340).

$x$  = multiplier of 0.162 for spills less than 1000 gallons in volume to adjust the damages calculated to the \$1-100 per gallon range.

$x$  = multiplier of 0.486 for spills of 1000 gallons or more in volume to adjust the damages calculated to the \$3-300 per gallon range.

Formula results shall be rounded to the nearest 0.01 to determine damages liability as follows: Decimals less than 0.005 shall be rounded down, and decimals equal to or greater than 0.005 shall be rounded up. For spills less than one thousand gallons, when the formula results in damages less than one dollar per gallon, the damages shall be adjusted to the minimum of one dollar per gallon spilled. For spills of one thousand gallons or more in volume, when the formula results in damages less than three dollars per gallon, the damages shall be adjusted to the minimum of three dollars per gallon spilled.

AMENDATORY SECTION (Amending Order 08-14, filed 3/10/09, effective 4/10/09)

**WAC 173-183-860 Calculation of damages for spills into freshwater wetlands.** (1) The formula provided in subsection (2) of this section shall be used to determine damages liability for spills into freshwater wetlands. The value of the variables used in the formula shall be determined by:

(a) The OSC as enumerated in WAC 173-183-810(1);

(b) The mutually agreed upon independent expert, if applicable, as described in WAC 173-183-810(2); and

(c) The RDA committee chair as enumerated in WAC 173-183-820 (1) (d).

(2) Damages liability shall be calculated using the following formula:

$$((\text{Damages } \$) = \text{gallons spilled} * 1.620 * \text{SVS} * (\text{OIL}_{\text{AT}} + \text{OIL}_{\text{MI}} + \text{OIL}_{\text{PER}}))$$

where:  $\text{gallons spilled}$  = the number of gallons of oil spilled as determined by procedures outlined in WAC 173-183-810;  
 $\text{SVS}$  = Spill vulnerability score [from WAC 173-183-700(3)];  
 $\text{OIL}_{\text{AT}}$  = Acute Toxicity Score for Oil [from WAC 173-183-340];  
 $\text{OIL}_{\text{MI}}$  = Mechanical Injury Score for Oil [from WAC 173-183-340]; and  
 $\text{OIL}_{\text{PER}}$  = Persistence Score for Oil [from WAC 173-183-340];  
1.620 = multiplier to adjust damages calculated to the \$1-100 per gallon range;))

$$\text{Damages } \$ = x * [(\text{OIL}_{\text{AT}} * \text{SVS} * \text{total gallons spilled}) + (\text{OIL}_{\text{MI}} * \text{SVS} * \text{total gallons spilled}) + (\text{OIL}_{\text{PER}} * \text{SVS} * \text{total gallons spilled})]$$

where:  $\text{total gallons spilled}$  = the number of gallons of oil spilled as determined by the procedures outlined in WAC 173-183-810;  
 $\text{SVS}$  = Spill vulnerability score (from WAC 173-183-700(3));  
 $\text{OIL}_{\text{AT}}$  = Acute Toxicity Score for Oil (from WAC 173-183-340);  
 $\text{OIL}_{\text{MI}}$  = Mechanical Injury Score for Oil (from WAC 173-183-340); and  
 $\text{OIL}_{\text{PER}}$  = Persistence Score for Oil (from WAC 173-183-340).  
 $x$  = multiplier of 1.620 for spills less than 1000 gallons in volume to adjust the damages calculated to the \$1-100 per gallon range.  
 $x$  = multiplier of 4.860 for spills of 1000 gallons or more in volume to adjust the damages calculated to the \$3-300 per gallon range.

Formula results shall be rounded to the nearest 0.01 to determine damages liability as follows: Decimals less than 0.005 shall be rounded down, and decimals equal to or greater than 0.005 shall be rounded up. For spills less than one thousand gallons, when the formula results in damages less than one dollar per gallon, the damages shall be adjusted to the minimum of one dollar per gallon spilled. For spills of one thousand gallons or more in volume, when the formula results in damages less than three dollars per gallon, the damages shall be adjusted to the minimum of three dollars per gallon spilled.

**WAC 173-183-870 ((Modification of damages based on actions taken by the PLP.)) Reduction of damages based on actions taken by the potential liable party (PLP).** ((~~(1) Damages calculated under WAC 173-183-830 through 173-183-860 may be reduced by the amounts specified in subsections (2) through (5) of this section, as determined by the RDA committee, in the following cases:~~

~~(a) Where the potentially liable party takes an action that results in no spill exposure and no injury to the following special features: Seal and sea lion haulouts, public recreational areas, smelt, sand lance, and herring spawning areas, salmon concentration areas, hardshell and softshell clam beds, and seabird breeding colonies;~~

~~(b) Where the potentially liable party takes an action that restores, rehabilitates, or enhances resources injured by the spill; and~~

~~(c) Where the potentially liable party immediately booms spilled oil that has not come into contact with the shore, in areas where water depth is greater than twenty meters, and immediately removes the spilled oil that has been contained in booming.~~

~~(2) When the conditions specified under subsection (1)(a) of this section are met, compensation shall be reduced by the amount that the special feature that was protected contributed to the amount of damages calculated under WAC 173-183-830 through 173-183-860. Decisions on how much the protected special feature contributed to the amount of damages calculated under the compensation schedule shall be made by the RDA committee.~~

~~(3) When conditions specified under subsection (1)(b) of this section are met, amount of damages calculated under WAC 173-183-830 through 173-183-860 may be reduced. Decisions on reduction of damages shall be made by the RDA committee.~~

~~(4) When the conditions specified under subsection (1)(c) of this section are met, the damages calculated under WAC 173-183-830 through 173-183-860 shall be reduced as described by the following steps:~~

~~(a) Two separate damages calculations shall be made using the applicable damage liability formula(s) provided in WAC 173-183-830 through 173-183-860. The number of gallons used in the first formula shall be the number of gallons immediately removed from the receiving environment as described in subsection (1)(c) of this section. The number of gallons used the second formula shall be the number of gallons spilled but not immediately removed from the receiving environment. The values of all other formula variables shall be as defined for the applicable formulas in WAC 173-183-830 through 173-183-860, except as described in subsection (4)(b) of this section;~~

~~(b) The values of the mechanical injury ( $OIL_{MI}$ ) and persistence ( $OIL_{PER}$ ) scores for oils shall be reduced by ten percent in the first formula; and~~

~~(c) Damages derived from the first and second formulas shall~~

~~be added together to calculate the reduced damages liability.~~

~~(5) In no case shall the modifications to compensation enumerated in subsections (1) through (4) of this section result in a reduction of damages to less than one dollar per gallon of oil spilled.))~~ (1) Damages liability calculated under WAC 173-183-830 through 173-183-860 may be reduced by the RDA committee based on post-spill actions by the PLP. Post-spill actions by the PLP that the RDA committee will evaluate are:

(a) Actions that result in effective containment of spilled oil, as determined by the state on-scene coordinator (OSC).

(b) Actions that keep spilled oil from contacting the shoreline, as determined by the state on-scene coordinator (OSC).

(c) Actions that recover spilled nonpersistent oil from the water's surface within twenty-four hours of the oil first entering the water. Spilled oil that consists of a combination of spilled nonpersistent and spilled persistent oil will be considered a nonpersistent oil.

(d) Actions that recover spilled persistent oil from the surface of the water within forty-eight hours of the oil first entering the water.

(2)(a) The RDA committee may only reduce resource damages under this section based on documented recovery data submitted to ecology by the PLP. The RDA committee may request additional information to facilitate recovery credit calculations. The data may be submitted on form number ECY-050-49, or other means that are acceptable to ecology. The submission may be electronic or other means that are acceptable to ecology. Measurement and documentation of recovered oil must be accomplished by the methods described in subsection (8) of this section, or as approved by the state OSC.

(b) Along with the data submitted by the PLP, the PLP must also submit:

(i) A statement signed and dated by the PLP or their representative, which states: "The data submitted are correct and accurate to the best of my knowledge."

(ii)(A) A statement signed by the state OSC that containment was either effective or not effective; and

(B) That spilled oil did or did not contact the shoreline;

(iii) A statement signed and dated by the state OSC that states: "I accept the information provided by the PLP and attest to the recovery data provided."

(c) The PLP must allow the state on-scene coordinator or their representative the opportunity to observe recovery credit calculation operations (storage, weighing, squeezing, and sampling).

(3)(a) When the conditions specified under subsection (1)(a), (b), and (c) of this section are met, calculation of damages under WAC 173-183-830(3) is modified by having the mechanical injury and persistence components multiplied by the difference between the total gallons spilled, as determined by WAC 173-183-810, and the gallons of nonpersistent oil recovered from the water by spill responders within twenty-four hours, such that:



$$\text{Damages (\$)} = x * [(SVS_{AT_i} * Oil_{AT} * \text{total gallons spilled}) + (SVS_{MI_j} * Oil_{ML} * \{\text{total gallons spilled} - \text{gallons recovered in 24 hours}\}) + (SVS_{PER_j} * Oil_{PER} * \{\text{total gallons spilled} - \text{gallons recovered in 24 hours}\})]$$

x = appropriate multiplier as determined in WAC 173-183-830(3).

(b) When the conditions specified under subsection (1)(a), (b), and (c) of this section are met, calculation of damages under WAC 173-183-840(2) is modified by having the mechanical injury and persistence components multiplied by the difference between the total gallons spilled, as determined by WAC 173-183-810, and the gallons of nonpersistent oil recovered from the water by spill responders within twenty-four hours, such that:

$$\text{Damages (\$)} = x * [(SVS_j * Oil_{AT} * \text{total gallons spilled}) + (SVS_j * Oil_{ML} * \{\text{total gallons spilled} - \text{gallons recovered in 24 hours}\}) + (SVS_j * Oil_{PER} * \{\text{total gallons spilled} - \text{gallons recovered in 24 hours}\})]$$

x = appropriate multiplier as determined in WAC 173-183-840(2).

(c) When the conditions specified under subsection (1)(a), (b), and (c) of this section are met, calculation of damages under WAC 173-183-850(2) and 173-183-860(2) is modified by having the mechanical injury and persistence components multiplied by the difference between the total gallons spilled, as determined by WAC 173-183-810, and the gallons of nonpersistent oil recovered from the water by spill responders within twenty-four hours, such that:

$$\text{Damages (\$)} = x * [(SVS * Oil_{AT} * \text{total gallons spilled}) + (SVS * Oil_{ML} * \{\text{total gallons spilled} - \text{gallons recovered in 24 hours}\}) + (SVS * Oil_{PER} * \{\text{total gallons spilled} - \text{gallons recovered in 24 hours}\})]$$

x = appropriate multiplier as determined in WAC 173-183-850(2) or 173-183-860(2).

(4)(a) When only the conditions specified under subsection (1)(c) of this section are met, calculation of damages under WAC 173-183-830(3) is modified by having the persistence components multiplied by the difference between the total gallons spilled and the gallons of nonpersistent oil recovered from the water by spill responders within twenty-four hours, such that:

$$\text{Damages (\$)} = x * [(SVS_{AT_i} * Oil_{AT} * \text{total gallons spilled}) + (SVS_{MI_j} * Oil_{ML} * \text{total gallons spilled}) + (SVS_{PER_j} * Oil_{PER} * \{\text{total gallons spilled} - \text{gallons recovered in 24 hours}\})]$$

x = appropriate multiplier as determined in WAC 173-183-830(3).

(b) When only the conditions specified under subsection (1)(c) of this section are met, calculation of damages under WAC 173-183-840(2) is modified by having the persistence components multiplied

by the difference between the total gallons spilled and the gallons of nonpersistent oil recovered from the water by spill responders within twenty-four hours, such that:

$$\text{Damages (\$)} = x * [(\text{SVS}_j * \text{Oil}_{\text{AT}} * \text{total gallons spilled}) + (\text{SVS}_j * \text{Oil}_{\text{MI}} * \text{total gallons spilled}) + (\text{SVS}_j * \text{Oil}_{\text{PER}} * \{\text{total gallons spilled} - \text{gallons recovered in 24 hours}\})]$$

$x$  = appropriate multiplier as determined in WAC 173-183-840(2).

(c) When only the conditions specified under subsection (1)(c) of this section are met, calculation of damages under WAC 173-183-850(2) and 173-183-860(2), is modified by having the persistence components multiplied by the difference between the total gallons spilled and the gallons of nonpersistent oil recovered from the water by spill responders within twenty-four hours, such that:

$$\text{Damages (\$)} = x * [(\text{SVS} * \text{Oil}_{\text{AT}} * \text{total gallons spilled}) + (\text{SVS} * \text{Oil}_{\text{MI}} * \text{total gallons spilled}) + (\text{SVS} * \text{Oil}_{\text{PER}} * \{\text{total gallons spilled} - \text{gallons recovered in 24 hours}\})]$$

$x$  = appropriate multiplier as determined in WAC 173-183-850(2) or 173-183-860(2).

(5)(a) When the conditions specified under subsection (1)(a), (b), and (d) of this section are met, calculation of damages under WAC 173-183-830(3) is modified by having the mechanical injury and persistence components multiplied by the difference between the total gallons spilled, as determined by WAC 173-183-810, and the gallons of persistent oil recovered from the water by spill responders within forty-eight hours, such that:

$$\text{Damages (\$)} = x * [(\text{SVS}_{\text{AT}_j} * \text{Oil}_{\text{AT}} * \text{total gallons spilled}) + (\text{SVS}_{\text{MI}_j} * \text{Oil}_{\text{MI}} * \{\text{total gallons spilled} - \text{gallons recovered in 48 hours}\}) + (\text{SVS}_{\text{PER}_j} * \text{Oil}_{\text{PER}} * \{\text{total gallons spilled} - \text{gallons recovered in 48 hours}\})]$$

$x$  = appropriate multiplier as determined in WAC 173-183-830(3).

(b) When the conditions specified under subsection (1)(a), (b), and (d) of this section are met, calculation of damages under WAC 173-183-840(2) is modified by having the mechanical injury and persistence components multiplied by the difference between the total gallons spilled, as determined by WAC 173-183-810, and the gallons of persistent oil recovered from the water by spill responders within forty-eight hours, such that:

$$\text{Damages (\$)} = x * [(\text{SVS}_j * \text{Oil}_{\text{AT}} * \text{total gallons spilled}) + (\text{SVS}_j * \text{Oil}_{\text{MI}} * \{\text{total gallons spilled} - \text{gallons recovered in 48 hours}\}) + (\text{SVS}_j * \text{Oil}_{\text{PER}} * \{\text{total gallons spilled} - \text{gallons recovered in 48 hours}\})]$$

$x$  = appropriate multiplier as determined in WAC 173-183-840(2).

(c) When the conditions specified under subsection (1)(a), (b), and (d) of this section are met, calculation of damages under WAC 173-183-850(2) and 173-183-860(2) is modified by having the mechanical injury and persistence components multiplied by the difference between the total gallons spilled, as determined by WAC 173-183-810, and the gallons of persistent oil recovered from the water by spill responders within forty-eight hours, such that:

$$\text{Damages (\$)} = x * [(\text{SVS} * \text{Oil}_{\text{AT}} * \text{total gallons spilled}) + (\text{SVS} * \text{Oil}_{\text{MI}} * \{\text{total gallons spilled} - \text{gallons recovered in 48 hours}\}) + (\text{SVS} * \text{Oil}_{\text{PER}} * \{\text{total gallons spilled} - \text{gallons recovered in 48 hours}\})]$$

$x$  = appropriate multiplier as determined in WAC 173-183-850(2) or 173-183-860(2).

(6)(a) When only the conditions specified under subsection (1)(d) of this section are met, calculation of damages under WAC 173-183-830(3) is modified by having the persistence components multiplied by the difference between the total gallons spilled and the gallons of persistent oil recovered from the water by spill responders within forty-eight hours, such that:

$$\text{Damages (\$)} = x * [(\text{SVS}_{\text{AT}} * \text{Oil}_{\text{AT}} * \text{total gallons spilled}) + (\text{SVS}_{\text{MI}} * \text{Oil}_{\text{MI}} * \text{total gallons spilled}) + (\text{SVS}_{\text{PER}} * \text{Oil}_{\text{PER}} * \{\text{total gallons spilled} - \text{gallons recovered in 48 hours}\})]$$

$x$  = appropriate multiplier as determined in WAC 173-183-830(3).

(b) When only the conditions specified under subsection (1)(d) of this section are met, calculation of damages under WAC 173-183-840(2) is modified by having the persistence components multiplied by the difference between the total gallons spilled and the gallons of persistent oil recovered from the water by spill responders within forty-eight hours, such that:

$$\text{Damages (\$)} = x * [(\text{SVS}_i * \text{Oil}_{\text{AT}} * \text{total gallons spilled}) + (\text{SVS}_i * \text{Oil}_{\text{MI}} * \text{total gallons spilled}) + (\text{SVS}_i * \text{Oil}_{\text{PER}} * \{\text{total gallons spilled} - \text{gallons recovered in 48 hours}\})]$$

$x$  = appropriate multiplier as determined in WAC 173-183-840(2).

(c) When only the conditions specified under subsection (1)(d) of this section are met, calculation of damages under WAC 173-183-850(2) and 173-183-860(2), is modified by having the persistence components multiplied by the difference between the total gallons spilled and the gallons of persistent oil recovered from the water by spill responders within forty-eight hours, such that:

$$\text{Damages (\$)} = x * [(\text{SVS} * \text{Oil}_{\text{AT}} * \text{total gallons spilled}) + (\text{SVS} * \text{Oil}_{\text{MI}} * \text{total gallons spilled}) + (\text{SVS} * \text{Oil}_{\text{PER}} * \{\text{total gallons spilled} - \text{gallons recovered in 48 hours}\})]$$

x = appropriate multiplier as determined in WAC 173-183-850(2) or 173-183-860(2).

(7) In no case shall the modifications to damages liability enumerated in subsections (3) through (6) of this section result in a reduction of damages to less than one dollar per gallon of oil spilled for those spills of less than one thousand gallons total, and three dollars per gallon of oil spilled for those spills of one thousand gallons or more in total.

(8)(a) To reduce resource damage liability, the PLP must provide oil recovery information to the OSC. The PLP may provide the information required in (b) of this subsection on form number ECY-050-49, or other means that are acceptable to ecology. The submission may be electronic or other means that are acceptable to ecology. Ecology may request additional information if it is needed to facilitate recovery credit calculations.

(b) The information provided must include:

(i) Date and time of the initial spill.

(ii) Date and time of when mechanical recovery operations ended, when oiled sorbents were removed from the water, and when oiled debris were removed from the water.

(iii) Name and contact information for the PLP.

(iv) Name of the contractors doing clean-up work, if different than the PLP.

(v) Spill source and location.

(vi) Oil type - Common name (gasoline, diesel, jet fuel, aviation fuel, kerosene, lube oil, hydraulic oil, transformer mineral oil, bunker oil, intermediate fuel oil, crude oil, asphalt, vegetable oil, other).

(vii) Specific gravity of the spilled oil and a determination of whether it is nonpersistent or persistent by definition (see WAC 173-183-100 (25) and (30)).

(viii) For persistent oils (WAC 173-183-100(30)), laboratory data that specifies the specific gravity of the oil.

(ix)(A) For mechanical or hand recovery operations, a record signed by the PLP's on-scene supervisor of the amount, in gallons, of water-oil mix, water, and oil in the storage device before recovery operations start. This record must be created prior to using the storage device for recovery operations. The amount of oil in each storage device used must be physically measured by measuring the thickness of oil on the water surface.

(B) To receive credit for oil mixed with water, including dissolved fractions or emulsified oil, oil must be measured by the collection of at least two representative samples of the water fraction from each storage device. The samples must be analyzed for oil content by a laboratory agreed upon by the OSC and PLP, and the results shared with the OSC.

(x) Verification that all oleophilic sorbent materials recovered from the water were stored separate from other spill generated wastes, were stored in double plastic bags to reduce leakage and evaporation, and were kept out of the rain as much as practicable.

(xi) For volumetric calculations of spent oleophilic sorbent

materials, the PLP must provide the total gallons of mixed water-oil squeezed from the sorbents, the total water recovered, and total oil recovered. Oil remaining in the pads must then be calculated following (b)(xii) of this subsection.

(xii)(A) For gravimetric calculations of spent oleophilic sorbent materials, the PLP must provide the total weight of oiled sorbents, total weight of preoiled sorbents, total weight of recovered oil, and make the conversion to total gallons of oil recovered.

(B) Unless demonstrated otherwise by the PLP, the water content of spent oleophilic sorbent material is assumed to be twenty-five percent by weight.

(xiii) Verification that oiled debris removed from the water was collected with minimal water and stored separately from other spill generated wastes.

(xiv)(A) For recovery credit for oil recovered from debris on the water's surface, the PLP must take two representative samples of oiled debris from each area where debris is collected and have it analyzed for oil content by weight at a laboratory agreed upon by the OSC and PLP. The laboratory results must be shared with the OSC.

(B) The PLP must provide the weight of all the oiled debris recovered from the water from each collection area, the total weight of the oil in the debris based on (b)(xiv)(A) of this subsection, and the total gallons of oil in the debris.